

Atty Docket: 1802.03

Claim Amendment under 37 CFR 1.121(c)

Claim 1. (Cancelled)

5 Claims 2. - 3. (Cancelled)

Claims 4. - 19 (Cancelled)

10 Claim 20. (Currently amended) A zoom system for forming  
an image with varying magnification comprising one  
or more variable focal length lenses, wherein the  
variable focal length lens is made of a micromirror  
array lens, wherein the micromirror array lens  
comprises a plurality of micromirrors, wherein each  
15 micromirror is controlled to change the focal length  
of the micromirror array lens, wherein the  
micromirror array lens further comprises a plurality  
of mechanical structures upholding the micromirrors  
and actuating components actuating the micromirrors,  
20 [[The zoom system of claim 1,]] wherein the  
micromirror array lens is an adaptive optical  
component, wherein the micromirror array lens  
corrects aberrations.

At'ty Docket: 1802.03

Claim 21. (Currently amended) A zoom system for forming  
an image with varying magnification comprising one  
or more variable focal length lenses, wherein the  
variable focal length lens is made of a micromirror  
5 array lens, wherein the micromirror array lens  
comprises a plurality of micromirrors, wherein each  
micromirror is controlled to change the focal length  
of the micromirror array lens, wherein the  
micromirror array lens further comprises a plurality  
10 of mechanical structures upholding the micromirrors  
and actuating components actuating the micromirrors,  
[[The zoom system of claim 1,]] wherein the  
micromirror array lens is an adaptive optical  
component, wherein the micromirror array lens  
15 corrects the defects of the zoom system that cause  
the image to deviate from the rules of paraxial  
imagery.

Claim 22. (Cancelled)

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Claim 23. (Currently amended) A zoom system for forming  
an image with varying magnification comprising one  
or more variable focal length lenses, wherein the  
variable focal length lens is made of a micromirror

Att'y Docket: 1802.03

array lens, wherein the micromirror array lens comprises a plurality of micromirrors, wherein each micromirror is controlled to change the focal length of the micromirror array lens, wherein the 5 micromirror array lens further comprises a plurality of mechanical structures upholding the micromirrors and actuating components actuating the micromirrors, [[The zoom system of claim 1,]] wherein the micromirror array lens is controlled to satisfy the 10 same phase condition for each wavelength of Red, Green, and Blue (RGB), respectively, to get a color image.

Claim 24. (Original) The zoom system of claim 23, 15 further comprising a plurality of bandpass filters.

Claim 25. (Original) The zoom system of claim 23, further comprising a photoelectric sensor, wherein the photoelectric sensor comprises Red, Green, and 20 Blue (RGB) sensors, wherein a color image is obtained by treatment of electrical signals from the Red, Green, and Blue (RGB) sensors.

Claim 26. (Original) The zoom system of claim 25, 25 wherein the treatment of electrical signals from the

Att'y Docket: 1802.03

Red, Green and Blue (RGB) sensors is synchronized and/or matched with the control of the micromirror array lens to satisfy the same phase condition for each wavelength of Red, Green and Blue (RGB),  
5 respectively.

Claims 27. - 32. (Cancelled)

Claim 33. (Currently Amended) A zoom system for forming  
10 an image with varying magnification comprising one  
or more variable focal length lenses, wherein the  
variable focal length lens is made of a micromirror  
array lens, wherein the micromirror array lens  
comprises a plurality of micromirrors, wherein each  
15 micromirror is controlled to change the focal length  
of the micromirror array lens, wherein the  
micromirror array lens further comprises a plurality  
of mechanical structures upholding the micromirrors  
and actuating components actuating the micromirrors,  
20 wherein the variable focal length lenses comprise a  
first variable focal length lens and a second  
variable focal length lens, wherein the focal length  
of the first variable focal length lens and the  
focal length of the second variable focal length  
25 lens are changed to form the image in-focus at a

Att'y Docket: 1802.03

given magnification,

~~[[The zoom system of claim 27,]]~~ further comprising

a focus lens group, an elector lens group and a

relay lens group, wherein the first variable focal

5 length lens forms a variator lens group, and the

second variable focal length lens forms a

compensator lens group.